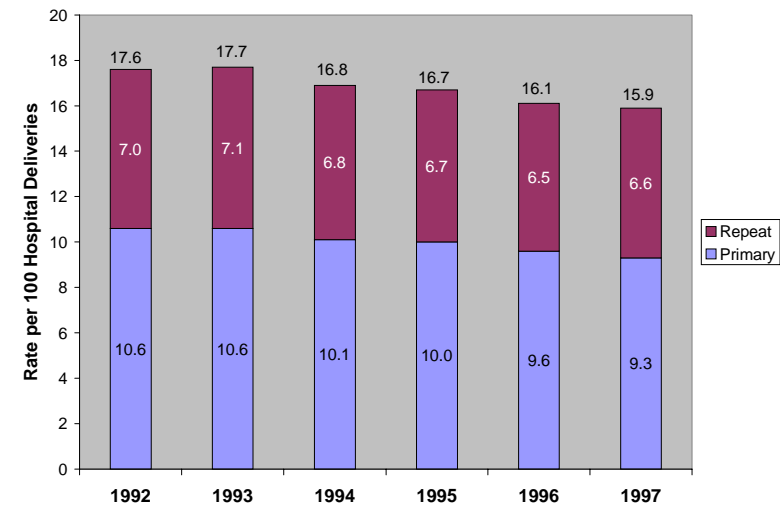


Cesarean section (C-section) is the surgical delivery of an infant through incisions in the abdomen and uterus. When used appropriately, C-section can be lifesaving for the mother or fetus. However, C-sections also result in longer hospital stays, longer recovery times, and higher medical costs. C-section rates in the U.S. increased from 4.5% in 1965 to a peak rate of 24.4% in 1987. Rates in the late 1980s were much higher than in other developed countries with comparable or better birth and maternal outcomes, leading to efforts to reduce the U.S. C-section rate. More recently, concerns have been raised that some efforts to reduce C-section rates further may have adverse outcomes. This Health Status Update reviews data from a recent Utah Department of Health and Health Data Committee report, *Cesarean Section Deliveries in Utah Hospitals, 1992-1997*.

### Cesarean Section Trends

Rates of Cesarean section deliveries per 100 hospital deliveries, according to whether the C-section was a primary or repeat C-section, Utah 1992-1997.

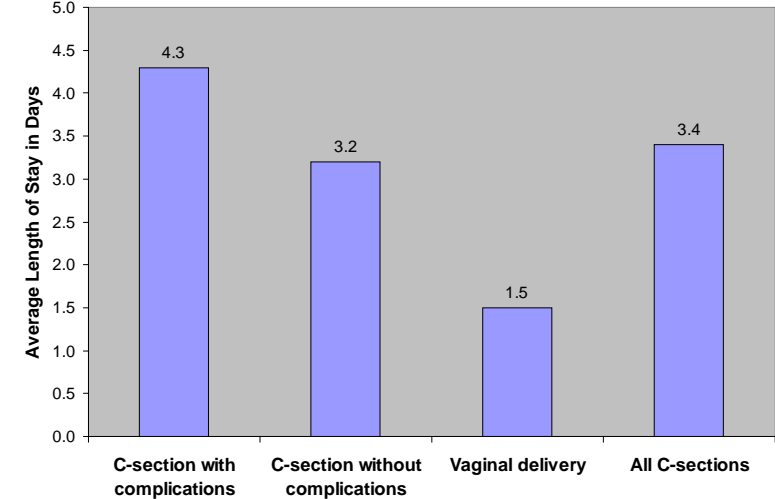


Key findings from that report included:

- The overall C-section rate in Utah declined from 17.7% in 1993 to 15.9% in 1997. The 1997 rate had nearly reached the Healthy People 2000 Objective of (no more than) 15%.
- Utah’s overall, primary, and repeat C-section rates were all lower than the respective U.S. rates. Utah’s 1995 primary C-section rate was 11.2 per 100 women without a previous C-section compared to the U.S. rate of 14.7. Utah’s 1995 repeat C-section rate was 63.8 per 100 deliveries in women with a previous C-section, compared to the U.S. rate of 72.5.
- In Utah from 1992-1997, average lengths of stay were substantially longer for women with C-section deliveries with and without complications (4.3 and 3.2 days, respectively) than for vaginal deliveries (1.5 days).

### Length of Stay for Cesarean Sections

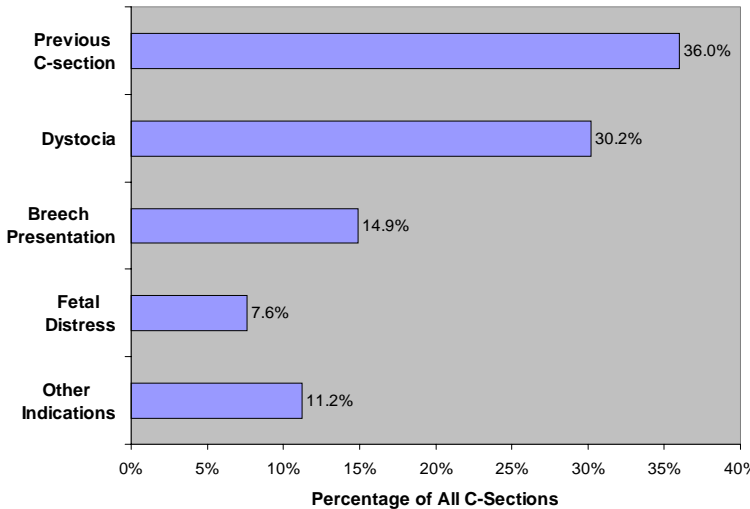
Average length of stay for hospital deliveries with Cesarean section (with and without complications), and vaginal deliveries, Utah 1992-1997.



- The most common indications for C-section delivery in Utah (1992-1997) were previous C-section delivery (36.0% of all C-section deliveries), dystocia (abnormal labor) (30.2%), breech presentation (14.9%), fetal distress (7.6%), and “other medical reasons” (11.2%).

### Cesarean Sections by Indication

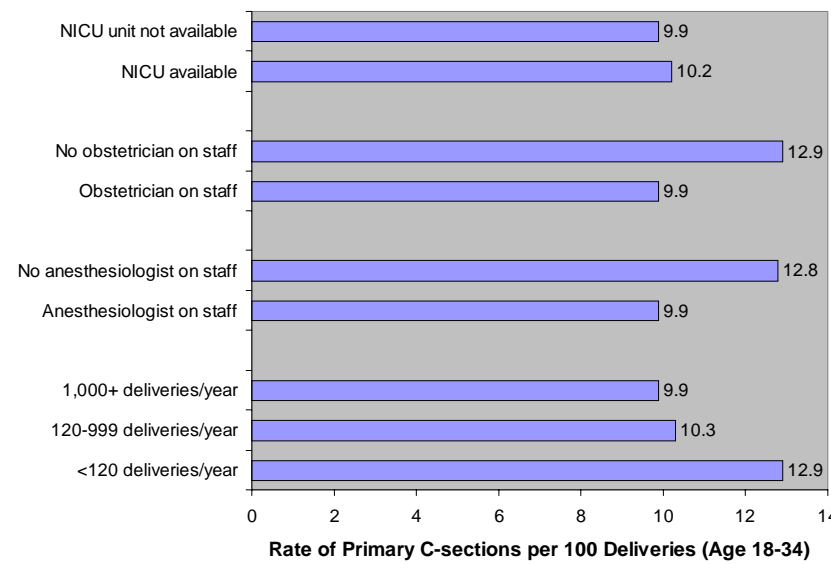
Percentage of all cesarean sections according to the principal indication, Utah 1992-1997.



- For women with those potential indications for C-section (1992-1997), the risk of C-section was highest for breech presentation (where breech presentation was noted, 90% of deliveries were by C-section), followed by previous C-section (63%), dystocia (50%), and fetal distress (24%).
- C-section rates varied among hospitals: primary C-section rates (mother’s age 18-34) were higher in hospitals with no obstetrician on staff; in hospitals with no anesthesiologist on staff; in hospitals with fewer deliveries per year, and in rural hospitals (see figure for rates).

# Primary C-section by Hospital Type

Rate of primary cesarean section (per 100 hospital deliveries in women without previous C-section) in women age 18-34 years according to selected characteristics of the hospital, Utah 1992-1997.



- Rates of C-section varied by community (examined using 61 small areas based on zip code of mother’s residence):
  - C-section rates were highest for Sevier/Piute/Wayne counties (24%), Southwest Health District (excluding Cedar City and Washington County), Tri-county Health District (23%), and Juab/Millard/Sanpete counties (21%).
  - C-section rates were lowest for Logan and Other Cache/Rich counties (12%) and Provo/BYU and Provo South (13%).

C-section rates in Utah are lower than national rates and have decreased over the past 5 years. When used for appropriate indications, C-section is a safe and effective intervention to improve infant or maternal outcomes. However, C-sections also result in increased morbidity and costs and should not be used solely for convenience of doctor or patient. Variation in use of C-sections across communities and hospitals in Utah suggest that avoidable C-sections continue to occur in Utah and can provide guidance for carefully focused efforts to prevent unnecessary surgical deliveries.



## September Utah Health Status Update

Copies of the complete report, *Cesarean Section Deliveries in Utah Hospitals, 1992-1997*, can be obtained from the Office of Health Care Statistics, Utah Department of Health, P. O. Box 144004, Salt Lake City, Utah 84114-4004, (801) 538-7048, FAX (801) 538-9916, email: [jscarlet@doh.state.ut.us](mailto:jscarlet@doh.state.ut.us). Additional information about this topic is available from the Center for Health Data, Utah Department of Health, P O Box 142101, Salt Lake City, Utah 84114-2101, (801) 538-9191, FAX (801) 536-0947, email: [phdata@doh.state.ut.us](mailto:phdata@doh.state.ut.us). Please send any comments on this report to the Center for Health Data.

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